

## Mission Statement

Rega's philosophy is to make high quality products at sensible prices, as a means of reproducing music as faithfully as possible. Rega is committed to the design and development of new and existing products, both in hi-fi and other areas, that will perpetuate Rega's values of quality and value for money.

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## Introduction

Your Rega P9 has been designed to be effective, easy to use and above all - to reproduce music better than any other turntable. We have omitted all the usual gimmicks and genuinely concentrated the manufacturing costs on the high quality components and design necessary to reproduce records accurately.

For example: a complex sub-chassis suspension is normally necessary to reduce motor noise. However they are difficult to maintain and degrade performance. Rega have designed a unique phase adjustable power supply which eliminates motor vibration at source and therefore eradicates the need for a suspension.

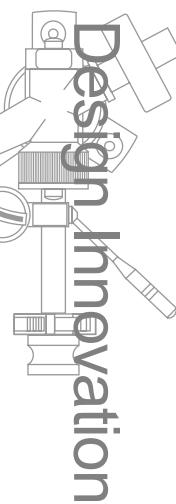
Rega's design skill and the use of extremely high quality components ensure that your turntable will perform at its optimum. The tips we give here may help to give you maximum musical enjoyment and ease of use for many years.

## Tonearm

The New P9 has an extensively redesigned tonearm, the all new RB1000. Many changes have been made to improve the original RB900 even further. The aluminium tube has been polished rather than lacquered so as to reduce the weight. The entire bearing housing is now manufactured from stainless steel and all parts have been manufactured to exacting tolerances which are apparent from the tonearms appearance.

The tonearm tube itself (which is a one piece silicone/aluminium casting) is very rigid, whilst being low mass. The tonearm assembly is concentrated around precision, hardened stainless steel, miniature ball races of the highest quality. The bearings fit on to ground shafts and into the tonearm using interference fits. This means that no adhesive is required and therefore none of the associated (component - adhesive - component) losses in rigidity prevail. It is fitted to the plinth by a 3-point fixing. This technique will cause less stress on the plinth and the bearing housing of the tonearm, and therefore the least possible resonance.

The RB1000 tonearm is designed to maximize the cantilever acceleration and travel as much as possible with the utmost accuracy within the cartridge body, thus providing new levels of information.



# Design Innovation

## Platter

The platter is produced from a ceramic oxide powder which is compressed, fired and diamond ground to size. (Because this platter is as stiff and hard as sapphire, the only improvement that can be made would be to make it from diamond.) This is again a first in the industry at volume production levels. Even so, each platter takes many hours to produce. Expensive detail design ensures it only sits on three points on the centre hub.

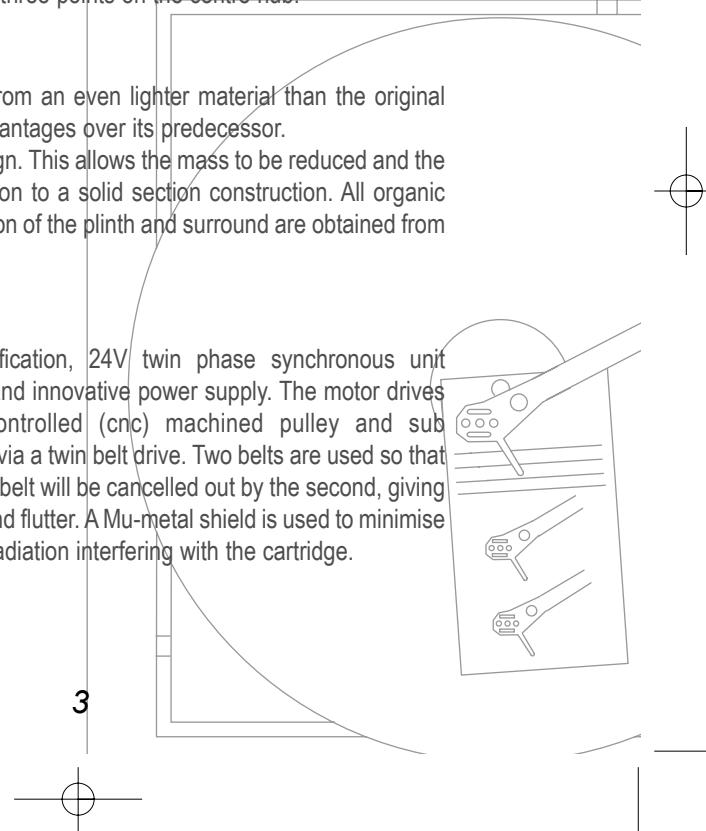
## Plinth

The new P9 plinth is made from an even lighter material than the original Planar which again offers advantages over its predecessor.

The plinth is of a skeletal design. This allows the mass to be reduced and the rigidity increased in comparison to a solid section construction. All organic materials used in the production of the plinth and surround are obtained from sustainable sources.

## Motor

The motor is a high specification, 24V twin phase synchronous unit controlled by Rega's unique and innovative power supply. The motor drives the computer-numerically-controlled (cnc) machined pulley and sub platter/hub-bearing assembly via a twin belt drive. Two belts are used so that any small inaccuracies in one belt will be cancelled out by the second, giving unusually low levels of wow and flutter. A Mu-metal shield is used to minimise extraneous electromagnetic radiation interfering with the cartridge.



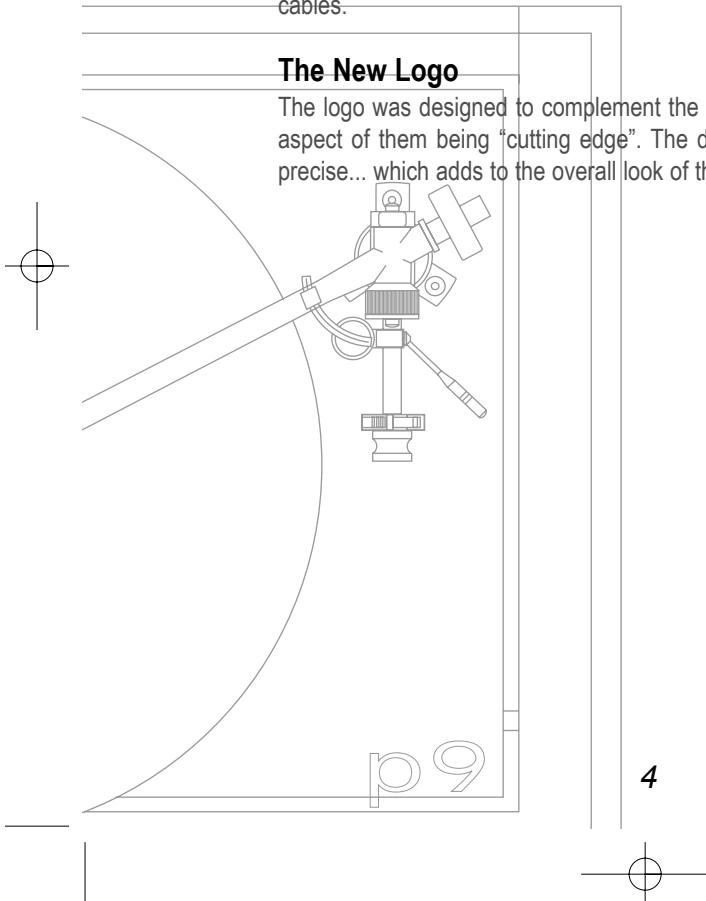
## Design Innovation

### Interconnects

We have used the highest quality XLR and phono connectors and low noise, wide bandwidth interconnect cable. These are genuine professional products and are the best available for the job. Do not attempt to fit any other wires or cables.

### The New Logo

The logo was designed to complement the turntable and tonearm from the aspect of them being "cutting edge". The design is clean, sharp and very precise... which adds to the overall look of the turntable.



## Caring for your P9

### Transporting your P9

Should you need to transport your P9, to avoid any possible transit damage, the following recommendations must be followed.

1. Remove tonearm balance weight and secure the arm in its rest with tape or covered wire. This will ensure no sudden or violent movement is transmitted to the delicate bearings.
2. Remove ceramic platter. When removing, hold down the metal hub at the same time as lifting the platter on each side. When removing or replacing, ensure it is done evenly to avoid chipping to the platter.
3. NEVER place your P9 upside-down or on its side. This would allow oil in the hub/bearing assembly to leak and cause speed and or wear problems.
4. If you have to ship your turntable or use a carrier, use ALL the original packaging. If in doubt ask your dealer.

## Power Supply

### Power Supply

When the power supply is first switched on, the power L.E.D. in the power switch will flash. 33 rpm is selected by pressing the 33 rpm button. Once pressed 33 rpm is selected and the L.E.D will flash until the turntable has settled. To deactivate 33 rpm press the button again or press 45 rpm. If 45 rpm is pressed then the L.E.D will flash again until the turntable has settled at 45 rpm. To deactivate 45 rpm press the 45 rpm button again or 33 rpm.

When in the idle state the power L.E.D will flash. This is to show the power supply is in standby mode and no output is present. The unit remains powered up but in an idle state. i.e. the drive amplifier is disconnected (muted) from the motor.

To switch off at any time, simply press the power switch.



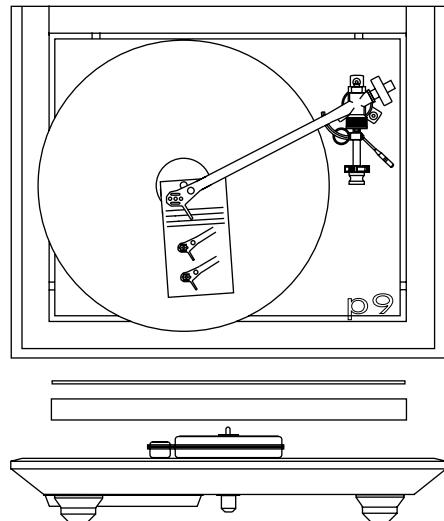
The external power supply unit is a quartz crystal locked system. To ensure accurate speed stability of the platter motor, two quartz crystal control reference oscillators have been utilised. This system produces a high frequency (3 MHz for 33 and 4 MHz for 45) signal, which is then divided

## Power Supply

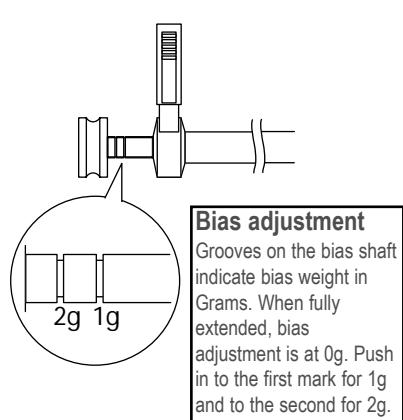
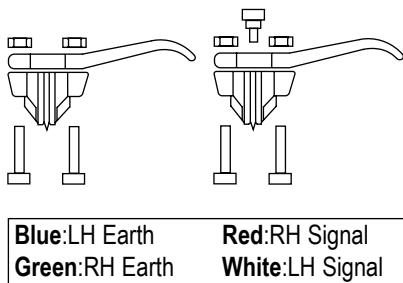
down to feed generously rated, high current power fet amps.

The output from these is very pure (<0.03 THD, this is a lower value than many power amplifiers output). The beauty of this power supply is that a dual phase is supplied to the motor, the phases of which may be varied in relation to each other. This means that the power supply phases can be (and are) trimmed to eliminate all vibration from the motor. In turn, this means that there is no need for plinth suspension, which would ordinarily be required to eliminate motor resonance.

To minimise the risk of hum pick up by the cartridge, the power supply should be situated as far from the P9 as the interconnect cable will allow.



# Setup



## Setting tracking force

With the cartridge fitted and aligned using the protractor supplied, set the tracking force dial and bias adjustment shaft to zero. Adjust the balance weight along its shaft until the stylus is "floating" just clear of the record. (N.B. it's quite normal for the tonearm to swing away from the centre of the record by itself. This is in the main caused by very low friction bearings.)

Return the tonearm to its rest, and the tracking force can now be applied by setting the tracking force dial to the upper limit of the cartridge manufacturers recommended range, taking note of the mark on the tonearm. Set the bias adjustment shaft to the same number as the tracking force dial i.e. 1.75g tracking force for Rega cartridges = 1.75g on the bias shaft (see left).

## Hints & Tips

1) Mount the turntable on a rigid, level surface. A light shelf or turntable support (such as our own) screwed to a wall or in an alcove is ideal. Avoid mounting on hollow or heavy cabinets or anything mounted on a wooden floor.

2) Try to keep the lid closed while playing the records. This will prevent dust falling on to the records and make cleaning unnecessary. There may also be a sonic improvement.

3) Don't use any record cleaner that works while the record is playing or any cleaners that use water or solvents. If you keep your records stored in their sleeves, avoid touching the playing surfaces, play with the lid down and **keep all water and fluids away**, cleaning should not be necessary. Don't worry about visible dust on the record surface, the stylus brushes this aside and any that collects on the stylus can be easily blown away. In general, record cleaning is

overdone and one should not believe all the claims made by record cleaner manufacturers.

4) Leave the turntable running during a record playing session. Switch on before the session and only switch off after you have finished. Use the electronic speed control to change speeds.

5) Don't lift the centre hub out from the main bearing. The bearing is factory assembled with a film of special thick lubricant. If the centre hub is removed this film may be disturbed.

6) Rega turntables are designed to optimise performance for music reproduction and therefore no compromises have been made to give quick start times. The normal time taken for full speed to be reached is between 5-10 seconds.

7) The arm earth (or ground) is automatically connected through the arm cable screening. No

other earthing should be necessary.

8) Save the original packing in case you ever need to transport the turntable.

9) Don't use any polishes on the turntable or lid. To clean or dust, wipe gently with a soft cotton duster (slightly damp only if necessary).

10) Always deactivate the power supply before disconnecting the turntable.

**Should you experience any problem with your turntable or wish to enquire about servicing please contact your Rega dealer.**